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STRUCTURE FILE UPDATES: 16 SEP 2009 HIGHEST RN 1185221-67-3
 DICTIONARY FILE UPDATES: 16 SEP 2009 HIGHEST RN 1185221-67-3

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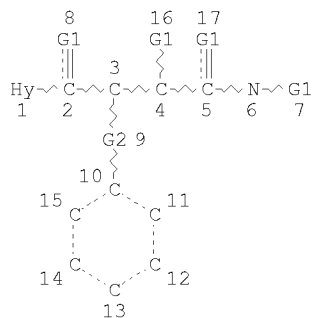
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 VAR G2=AK/ID
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 DEFAULT ECLEVEL IS LIMITED
 ECOUNT IS E4 C E2 N AT 1

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STEREO ATTRIBUTES: NONE
 L7 74 SEA FILE=REGISTRY SSS FUL L5

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74 ANSWERS

=> b zcap
 FILE 'ZCAPLUS' ENTERED AT 17:21:08 ON 17 SEP 2009
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FILE COVERS 1907 - 17 Sep 2009 VOL 151 ISS 12
FILE LAST UPDATED: 16 Sep 2009 (20090916/ED)
REVISED CLASS FIELDS (/NCL) LAST RELOADED: Jun 2009
USPTO MANUAL OF CLASSIFICATIONS THESAURUS ISSUE DATE: Jun 2009

ZCAplus now includes complete International Patent Classification (IPC) reclassification data for the third quarter of 2009.

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This file contains CAS Registry Numbers for easy and accurate substance identification.

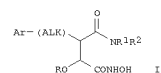
The ALL, BIB, MAX, and STD display formats in the CA/CAPLUS family of databases have been updated to include new citing references information. This enhancement may impact record import into database management software. For additional information, refer to NEWS 9.

=> d bib abs hitrn fhitr 110 tot

L10 ANSWER 1 OF 1 SCAPLUS COPYRIGHT 2009 ACS ON STN
 AN 2005:182646 SCAPLUS
 DN 142:280227
 TI Preparation of hydroxamates as matrix metalloproteinase inhibitors
 IN Pain, Gilles; Dwyer, Stephen John; Romarun, Agnes
 PA Vernalis Oxford Limited, UK; Laboratoires Serono S.A.
 SO PCT Int. Appl., 89 pp.
 CO DEN: PIXXD2
 DT Patent
 LA English
 FAN.CNT 1

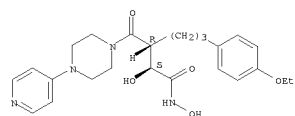
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO--2005019194	A1	20050303	2004WO-GB0003558	20040818
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NW:	BW, GH, GM, KE, LS, MW, ME, NA, SD, SL, SE, TZ, UG, ZM, ZW, AM, AZ, BY, BS, KE, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			
AU--2004266896	A1	20050303	2004AU-000266896	20040818
CA--2536576	A1	20050303	2004CA-002536576	20040818
EP--1660471	A1	20060531	2004EP-000768117	20040818
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JP--200703422	T	20070222	2006JP-000524410	20040818
CN--1930139	A	20070314	2004CN-080023748	20040818
KB--2006037446	A	20060503	2006KB-000703187	20060216
MX--2006001865	A	20060920	2006MX-000001865	20060216
NO--2006001302	A	20060519	2006NO-000001302	20060322
NO--2006002358	A	20070926	2006ZA-000002358	20060322
IN--200600997	A	20070615	2006IN-000000997	20060322
US--2006021820	A1	20061214	2006US-000568433	20060808
PRAI 2003GB-000028632	W	20030823		
2004WO-GB0003558	W	20040818		

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUM DISPLAY FORMAT
 OS CASREACT 142:280227; MARPAT 142:280227
 GI



AB Title compds. I [wherein Ar = (un)substituted (hetero)aryl or (hetero)cycloalkyl; R = H or (cyclo)alkyl; Alk = alkylene or alkenylene; R1 and R2 link together to form (un)substituted heterocycloalkyl rings and which is optionally fused to (un)substituted (hetero)cycloalkyl rings; and

L10 ANSWER 1 OF 1 SCAPLUS COPYRIGHT 2009 ACS ON STN (Continued)
847038-64-6P, 6-(4-Methoxyphenyl)-(2S)-hydroxy-(3R)-[4-(4-pyridin-2-yl)piperazin-1-yl]carbonyl]hexanoic acid hydroxamide
847038-66-6P, 6-(4-Fluorophenyl)-(3R)-[4-(2-fluorophenyl)piperazin-1-yl]carbonyl]-(2S)-hydroxyhexanoic acid hydroxamide **847038-68-6P**, 6-(4-Fluorophenyl)-(2S)-hydroxy-(3R)-[4-(4-pyridin-2-yl)piperazin-1-yl]carbonyl]hexanoic acid hydroxamide **847038-70-4P**, (3R)-[4-(4-Benzyl-(2S)-methylpiperazin-1-yl)carbonyl]-6-(4-ethoxyphenyl)-(2S)-hydroxyhexanoic acid hydroxamide **847038-72-6P**, (3R)-[4-(4-Benzyl-(2S)-methylpiperazin-1-yl)carbonyl]-6-(4-methoxyphenyl)-(2S)-hydroxyhexanoic acid hydroxamide **847038-74-8P**, (3R)-[4-(4-Benzyl-(2S)-isobutylpiperazin-1-yl)carbonyl]-6-(4-methoxyphenyl)-(2S)-hydroxyhexanoic acid hydroxamide **847038-76-6P**, (3R)-[4-(4-Benzyl-(2S)-methylpiperazin-1-yl)carbonyl]-6-(4-fluorophenyl)-(2S)-hydroxyhexanoic acid hydroxamide **847038-78-2P**, (3R)-[4-(4-Benzyl-(2S)-isobutylpiperazin-1-yl)carbonyl]-6-(4-fluorophenyl)-(2S)-hydroxyhexanoic acid hydroxamide **847038-80-6P**, 4-[5-(4-Ethoxyphenyl)-(2R)-[(1S)-(hydroxy)(N-hydroxycarbonyl)methyl]pentanoyl]-(2S)-methylpiperazine-1-carboxylic acid tert-butyl ester **847038-82-6P**, 4-[5-(4-Ethoxyphenyl)-(2R)-[(1S)-(hydroxy)(N-hydroxycarbonyl)methyl]pentanoyl]-(2S)-isobutylpiperazine-1-carboxylic acid tert-butyl ester **847038-84-6P**, 4-[5-(4-Methoxyphenyl)-(2R)-[(1S)-(hydroxy)(N-hydroxycarbonyl)methyl]pentanoyl]-(2S)-methylpiperazine-1-carboxylic acid tert-butyl ester **847038-86-2P**, 4-[5-(4-Methoxyphenyl)-(2R)-[(1S)-(hydroxy)(N-hydroxycarbonyl)methyl]pentanoyl]-(2S)-isobutylpiperazine-1-carboxylic acid tert-butyl ester **847038-88-4P**, 4-[5-(4-Fluorophenyl)-(2R)-[(1S)-(hydroxy)(N-hydroxycarbonyl)methyl]pentanoyl]-(2S)-methylpiperazine-1-carboxylic acid tert-butyl ester **847038-90-8P**, 4-[5-(4-Fluorophenyl)-(2R)-[(1S)-(hydroxy)(N-hydroxycarbonyl)methyl]pentanoyl]-(2S)-isobutylpiperazine-1-carboxylic acid tert-butyl ester **847038-92-6P**, 6-(4-Ethoxyphenyl)-(2S)-methoxy-(3R)-[4-(2-fluorophenyl)piperazin-1-yl]carbonyl]hexanoic acid hydroxamide
 RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
 (Inhibitor; prepn. of hydroxamates as MMP inhibitors)
 IT **847039-40-1P**
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
 IT **104658-54-9**
 RL: PRPH (Prophetic)
 (Preparation of hydroxamates as matrix metalloproteinase inhibitors)
 RN 104658-54-9 SCAPLUS
 CN 1-Piperazinebutanamide, β -[3-(4-ethoxyphenyl)propyl]-N, α -dihydroxy- γ -oxo-4-(4-pyridinyl)-, (4R, 5S)-rel- (CA INDEX NAME)
 Relative stereochemistry.



OSC.G 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)
 RE.CNT 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10 ANSWER 1 OF 1 SCAPLUS COPYRIGHT 2009 ACS ON STN (Continued)
 enantiomers, diastereoisomers, salts, hydrates thereof] were
 prep. as inhibitors of matrix metalloproteinases. For example, II was
 synthesized starting from (2S)-Hydroxysuccinic acid diisopropyl ester in
 several steps, which showed inhibitory activity against MMP-9, MMP-2,
 MMP-1 and MMP-12 with IC50 values of <100 nM, <100 nM, >10000 nM, <100 nM,
 resp. II also showed 57% inhibition of IL2-induced peritoneal recruitment
 of lymphocytes at the dose of 3 mg/kg (vs. 76% inhibition by dexamethasone
 at the dose of 1 mg/kg). In general, I are selective inhibitors of MMP-12
 and MMP-9 relative to the collagenases and stromelysins. Therefore, I and
 pharmaceutical compns. thereof are useful in the treatment or prophylaxis
 of diseases primarily mediated by MMP-12 and/or MMP-9, esp.
 inflammatory conditions, such as multiple sclerosis and fibrosis.
104658-54-9
 RL: PRPH (Prophetic)
 (Preparation of hydroxamates as matrix metalloproteinase inhibitors)
 IT **847037-74-5P**, 6-(4-Ethoxyphenyl)-(2S)-hydroxy-(3R)-[4-(3-methoxyphenyl)piperazin-1-yl]carbonyl]hexanoic acid hydroxamide
847037-76-7P, 6-(4-Ethoxyphenyl)-(2S)-hydroxy-(3R)-[4-(4-methoxyphenyl)piperazin-1-yl]carbonyl]hexanoic acid hydroxamide
847037-78-9P, 6-(4-Ethoxyphenyl)-(2S)-hydroxy-(3R)-[4-(pyridin-2-yl)piperazin-1-yl]carbonyl]hexanoic acid hydroxamide
847037-80-3P, 6-(4-Ethoxyphenyl)-(2S)-hydroxy-(3R)-[4-(pyridin-4-yl)piperazin-1-yl]carbonyl]hexanoic acid hydroxamide
847037-92-7P, (3R)-[4-[(Benzodioxol-5-yl)methyl]piperazin-1-yl]carbonyl]-6-(4-ethoxyphenyl)-(2S)-hydroxyhexanoic acid hydroxamide
847037-94-9P, 6-(4-Ethoxyphenyl)-(2S)-hydroxy-(3R)-[4-[(pyridin-4-yl)methyl]piperazin-1-yl]carbonyl]hexanoic acid hydroxamide
847037-96-1P, 6-(4-Ethoxyphenyl)-(2S)-hydroxy-(3R)-[4-benzylpiperazin-1-yl]carbonyl]hexanoic acid hydroxamide
847037-98-3P, 6-(4-Ethoxyphenyl)-(2S)-hydroxy-(3R)-[4-(pyrimidin-2-yl)piperazin-1-yl]carbonyl]hexanoic acid hydroxamide
847038-00-0P, 6-(4-Ethoxyphenyl)-(2S)-hydroxy-(3R)-[4-(4-trifluoromethylpyrimidin-2-yl)piperazin-1-yl]carbonyl]hexanoic acid hydroxamide **847038-02-2P**, 6-(4-Ethoxyphenyl)-(2S)-hydroxy-(3R)-[4-(4-chloropyrimidin-2-yl)piperazin-1-yl]carbonyl]hexanoic acid hydroxamide **847038-04-4P**, (3R)-[4-[(4,6-Dimethoxy-1,3,5)triazin-2-yl]piperazin-1-yl]carbonyl]-6-(4-ethoxyphenyl)-(2S)-hydroxyhexanoic acid hydroxamide
847038-06-6P, 6-(4-Ethoxyphenyl)-(2S)-hydroxy-(3R)-[4-(3-trifluoromethylpyrimidin-2-yl)piperazin-1-yl]carbonyl]hexanoic acid hydroxamide **847038-08-8P**, **847038-19-1P**, **847038-21-5P**, (3R)-[4-[(3S)-Benzyl-4-benzylpiperazin-1-yl]carbonyl]-6-(4-ethoxyphenyl)-(2S)-hydroxyhexanoic acid hydroxamide **847038-23-7P**, **847038-26-0P**, 4-[4-[(Benzodioxol-5-yl)methyl]piperazin-1-yl]-(2S)-hydroxy-N-hydroxy-4-oxo-(3R)-[4-(trifluoromethylbenzyl)butylamide
847038-24-0P, 4-[4-[(Benzodioxol-5-yl)methyl]piperazin-1-yl]-(3R)-[4-(4-benzylbenzyl)-(2S)-hydroxy-N-hydroxy-4-oxobutylamide
847038-40-8P, 6-[3,5-Bis(trifluoromethyl)phenyl]-(2S)-hydroxy-(3R)-[4-(4-pyridin-2-yl)piperazin-1-yl]carbonyl]hexanoic acid hydroxamide
847038-46-4P, (3R)-[4-[(2S)-Benzyl-4-methylpiperazin-1-yl]carbonyl]-6-(4-ethoxyphenyl)-(2S)-hydroxyhexanoic acid hydroxamide
847038-48-6P, 6-(4-Ethoxyphenyl)-(2S)-hydroxy-(3R)-[4-[(4-trifluoromethylphenyl)sulfonyl]piperazin-1-yl]carbonyl]hexanoic acid hydroxamide **847038-50-0P**, 6-(4-Ethoxyphenyl)-(2S)-hydroxy-(3R)-[4-(4-tolylsulfonyl)piperazin-1-yl]carbonyl]hexanoic acid hydroxamide **847038-52-2P**, (3R)-[4-[(5-Bromothien-2-yl)sulfonyl]piperazin-1-yl]carbonyl]-6-(4-ethoxyphenyl)-(2S)-hydroxyhexanoic acid hydroxamide
847038-54-4P, (3R)-[4-[(5-Phenylsulfonylthien-2-yl)sulfonyl]piperazin-1-yl]carbonyl]-6-(4-ethoxyphenyl)-(2S)-hydroxyhexanoic acid hydroxamide **847038-56-6P**, (3R)-[4-(4-Butoxyphenylsulfonyl)piperazin-1-yl]carbonyl]-6-(4-ethoxyphenyl)-(2S)-hydroxyhexanoic acid hydroxamide
847038-58-8P, 6-(4-Ethoxyphenyl)-(2S)-hydroxy-(3R)-[4-(4-methoxy-2,3,6-trimethylphenylsulfonyl)piperazin-1-yl]carbonyl]hexanoic acid hydroxamide
847038-62-4P, 6-(4-Methoxyphenyl)-(2S)-hydroxy-(3R)-[4-(2-fluorophenyl)piperazin-1-yl]carbonyl]hexanoic acid hydroxamide

=> d bib abs hitstr l1l tot

L11 ANSWER 1 OF 1 SCAPLUS COPYRIGHT 2009 ACS on SIN (Continued)

AN 2006101557 ZCAPLUS

DN 1441:171021

TI Preparation of piperazine and related N-hydroxy succinic acid diamide derivatives as metalloproteinase inhibitors with therapeutic uses

IN Swinnen, Dominique; Bombrun, Agnes; Gonzalez, Jerome; Crosignani, Stefano; Gerber, Patrick; Jorand-Lebrun, Catherine

PA Applied Research Systems Ars Holding N.V., Neth. Antilles

SO PCT Int. Appl., 203 pp.

CODEN: PIXXD2

DT Patent

LA English

PAN_CNT 1

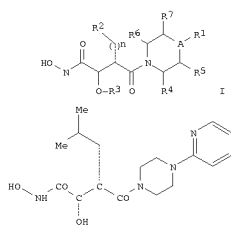
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO-2006010751	A1	20060202	2005MO-EP0053616	20050725
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RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GN, GD, GM, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MS, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
AJ 20060202	2005AN-000066313	20050725		
A1 20060202	2005CA-002570903	20050725		
A1 20070411	2005EP-00072035	20050725		
B1 20090429				
R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, AL, BA, HR, MK, YU				
A 20070627	2005CN-000025086	20050725		
T 20080313	2007JP-000523074	20050725		
A 20080520	2005BR-000013878	20050725		
A 20080827	2007ZA-000000744	20050725		
T 20090515	2008AT-000720235	20050725		
A 20070622	2006IN-000007460	20061211		
A 20070412	2007MX-000001022	20070125		
A 20080324	2007US-000572616	20070126		
A 20070503	2007KR-000704004	20070220		
A 20070426	2007NO-000000994	20070221		
A 20040726				
P 20040726				
P 20050131				
P 20050501				
M 20050725				

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

OS MAPPAT 144:171021

GI

L11 ANSWER 1 OF 1 SCAPLUS COPYRIGHT 2009 ACS on SIN (Continued)



AB The present invention is related to piperazine and related N-hydroxy succinic acid diamide derivs. (shown as I; variables defined below; e.g. (2S,3S)-N-hydroxy-2-hydroxy-5-methyl-3-[(4-(2-pyridinyl)-1-piperazinyl)carbonyl]hexanamide (shown as II)) and use thereof, in particular for the treatment and/or prophylaxis of autoimmune disorders, inflammatory diseases, cardiovascular diseases, neurodegenerative diseases, cancer, respiratory diseases and fibrosis, including multiple sclerosis, arthritis, emphysema, chronic obstructive pulmonary disease, liver and pulmonary fibrosis. A = -C(R)- and N; B is H or R forms a bond with either R5 or R7; R' = H, C1-C6 alkyl, C2-C6 alkenyl, C2-C6 alkynyl, C3-C8-cycloalkyl, heterocycloalkyl, aryl, heteroaryl, C3-C8-cycloalkyl, C1-C6 alkyl, heterocycloalkyl, C1-C6 alkyl, heteroaryl, C1-C6 alkyl, amino and alkoxy; R2 = H, C1-C6 alkyl, C2-C6 alkenyl, C2-C6 alkynyl, C3-C8-cycloalkyl, heterocycloalkyl, alkoxy, aryl and heteroaryl; R3 = H, C1-C6 alkyl, C2-C6 alkenyl and C2-C6 alkynyl; R4, R5, R6 and R7 = H, C1-C6 alkyl, C2-C6 alkenyl, C2-C6 alkynyl; or R4 and R7 form together a -CH2- linkage; n is an integer = 1, 2, 3, 4, 5 and 6; Carbons (2) and (3) are two chiral centers, wherein chiral center (2) has a configuration = 5 and R and wherein chiral center (3) has a 5 configuration as well as pharmaceutically acceptable salts thereof. Methods of preparation are claimed and preps. and/or characterization data for approx.90 examples of I are included. For example, I was prepared from a 55/45 mixture of (2S)- and (2R)-pentafluorophenyl 2-(4(4S)-2,6-dimethyl-5-oxo-1,3-dioxolan-4-yl)-4-methylpentanoate (preparation by partial diastereoisomerization of latter isomer) by 1st creating an amide linkage using 1-(2-pyridyl)piperazine (40 %) and then a 2nd amide linkage using hydroxylamine (31 %). IC50 values for inhibition of MMP-1, MMP-9 and MMP-12 by 16 examples of I are tabulated. Also, percentage of inhibition of IL-2-induced peritoneal recruitment of lymphocytes model for cellular migration that occurs during inflammation by 8 examples of I are tabulated.

II **874646-52-3P**, (2S,3S)-6-(4-Ethoxyphenyl)-N-hydroxy-2-hydroxy-3-[(1(2R)-2-methyl-4-(pyridin-2-yl)piperazin-1-yl)carbonyl]hexanamide **874646-54-5P**, (2S,3S)-6-(4-Ethoxyphenyl)-N-hydroxy-2-hydroxy-3-[(1(2S)-2-methyl-4-(2-pyridinyl)piperazin-1-yl)carbonyl]hexanamide **874646-56-7P**, (2S,3S)-6-(4-Ethoxyphenyl)-N-hydroxy-2-hydroxy-3-[(1(2R)-2-methyl-4-(pyrimidin-2-yl)piperazin-1-yl)carbonyl]hexanamide **874646-58-9P**, (2S,3S)-6-(4-Ethoxyphenyl)-3-[(1(2R)-4-(2-fluorophenyl)-2-methylpiperazin-1-yl)carbonyl]-N-hydroxy-2-hydroxyhexanamide **874646-79-4P**, (2S,3R)-6-(4-Ethoxyphenyl)-3-[(1-(4-(4-fluorophenyl)piperazin-1-yl)carbonyl)-N-hydroxy-2-hydroxyhexanamide **874646-82-9P**, (2S,3R)-6-(4-Ethoxyphenyl)-N-hydroxy-2-hydroxy-3-[(4-(5-(trifluoromethyl)pyridin-2-yl)piperazin-1-yl)carbonyl]hexanamide **874646-85-2P**, (2S,3R)-3-[(4-(5-Cyanopyridin-2-yl)piperazin-1-yl)carbonyl]-6-(4-ethoxyphenyl)-N-hydroxy-2-hydroxyhexanamide **874646-86-2P**, (2S,3R)-6-(4-Ethoxyphenyl)-N-hydroxy-2-hydroxy-3-[(4-(6-methylpyridin-2-yl)piperazin-1-yl)carbonyl]hexanamide

L11 ANSWER 1 OF 1 SCAPLUS COPYRIGHT 2009 ACS on SIN (Continued)

874646-87-4P, (2S,3R)-3-[(4-(6-Chloropyridin-2-yl)piperazin-1-yl)carbonyl]-6-(4-ethoxyphenyl)-N-hydroxy-2-hydroxyhexanamide **874646-88-5P**, (2S,3R)-3-[(4-(8-Chloropyridin-2-yl)piperazin-1-yl)carbonyl]-6-(4-ethoxyphenyl)-N-hydroxy-2-hydroxyhexanamide **874646-89-6P**, (2S,3R)-3-[(4-(4-Chloro-2-fluorophenyl)piperazin-1-yl)carbonyl]-6-(4-ethoxyphenyl)-N-hydroxy-2-hydroxyhexanamide **874646-92-1P**, (2S,3R)-3-[(4-(2-Chlorophenyl)piperazin-1-yl)carbonyl]-6-(4-ethoxyphenyl)-N-hydroxy-2-hydroxyhexanamide **874646-93-2P**, (2S,3R)-6-(4-Ethoxyphenyl)-N-hydroxy-2-hydroxy-3-[(4-(6-methyl-2-(trifluoromethyl)quinolin-4-yl)piperazin-1-yl)carbonyl]hexanamide **874646-94-3P**, (2S,3R)-6-(4-Ethoxyphenyl)-N-hydroxy-2-hydroxy-3-[(4-(3-(trifluoromethyl)pyridin-2-yl)piperazin-1-yl)carbonyl]hexanamide **874646-95-4P**, (2S,3R)-3-[(4-(3,5-Dichloropyridin-4-yl)piperazin-1-yl)carbonyl]-6-(4-ethoxyphenyl)-N-hydroxy-2-hydroxyhexanamide **874646-96-5P**, (2S,3R)-6-(4-Ethoxyphenyl)-N-hydroxy-2-hydroxy-3-[(4-(2-methoxyphenyl)piperazin-1-yl)carbonyl]hexanamide **874646-97-6P**, (2S,3R)-3-[(4-(4-Chlorophenyl)piperazin-1-yl)carbonyl]-6-(4-ethoxyphenyl)-N-hydroxy-2-hydroxyhexanamide **874646-98-7P**, (2S,3R)-6-(4-Ethoxyphenyl)-N-hydroxy-2-hydroxy-3-[(4-(pyridin-2-yl)piperazin-1-yl)carbonyl]hexanamide **874646-99-8P**, (2S,3R)-6-(4-Ethoxyphenyl)-N-hydroxy-2-hydroxy-3-[(4-(2-(morpholin-4-yl)ethyl)piperazin-1-yl)carbonyl]hexanamide **874647-00-4P**, (2S,3R)-3-[(4-(2-Cyanophenyl)piperazin-1-yl)carbonyl]-6-(4-ethoxyphenyl)-N-hydroxy-2-hydroxyhexanamide **874647-01-5P**, (2S,3R)-3-[(4-(2-Fluorophenyl)piperazin-1-yl)carbonyl]-N-hydroxy-2-hydroxy-6-(4-(trifluoromethoxy)phenyl)hexanamide **874647-02-6P**, (2S,3R)-3-[(4-(6-Chloropyridin-2-yl)piperazin-1-yl)carbonyl]-N-hydroxy-2-hydroxy-6-(4-(trifluoromethoxy)phenyl)hexanamide **874647-04-8P**, (2S,3R)-N-Hydroxy-2-hydroxy-3-[(4-(pyridin-2-yl)piperazin-1-yl)carbonyl]-6-(4-(trifluoromethoxy)phenyl)hexanamide **874647-38-8P**, (2S,3R)-6-(4-Ethoxyphenyl)-N-hydroxy-2-hydroxy-3-[(4-(2-(2-chlorophenyl)ethyl)piperazin-1-yl)carbonyl]hexanamide **874647-40-2P**, (2S,3R)-3-[(4-(Cyclohexyl)piperazin-1-yl)carbonyl]-6-(4-ethoxyphenyl)-N-hydroxy-2-hydroxyhexanamide **874647-54-8P**, (2R,3S)-3-Benzyl-N-hydroxy-2-hydroxy-4-oxo-4-[4-(4-(trifluoromethoxy)phenyl)piperazin-1-yl]butanamide **874647-55-9P**, (2S,3S)-3-Benzyl-N-hydroxy-2-hydroxy-4-[(2R)-2-methyl-4-(4-(trifluoromethoxy)phenyl)piperazin-1-yl]-4-oxobutanamide

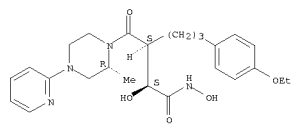
RU: PAC (Pharmacol. activity); SPN (synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(drug candidate; prepn. of piperazine and related N-hydroxy succinic acid diamide derivs. as metalloproteinase inhibitors with therapeutic uses)

RN **874646-52-3** ZCAPLUS

CN 1-Piperazinebutanamide, β -[3-(4-ethoxyphenyl)propyl]-N, α -dihydroxy-2-methyl- γ -oxo-4-(2-pyridinyl)-, (aS,BS,2R)- (CA INDEX NAME)

Absolute stereochemistry.

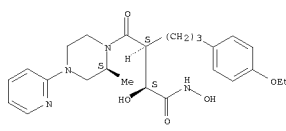


RN **874646-54-5** ZCAPLUS

CN 1-Piperazinebutanamide, β -[3-(4-ethoxyphenyl)propyl]-N, α -dihydroxy-2-methyl- γ -oxo-4-(2-pyridinyl)-, (aS,BS,2S)- (CA INDEX NAME)

Absolute stereochemistry.

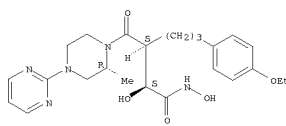
L11 ANSWER 1 OF 1 SCAPLUS COPYRIGHT 2009 ACS on SIN (Continued)



RN **874646-56-7** ZCAPLUS

CN 1-Piperazinebutanamide, β -[3-(4-ethoxyphenyl)propyl]-N, α -dihydroxy-2-methyl- γ -oxo-4-(2-pyridinyl)-, (aS,BS,2R)- (CA INDEX NAME)

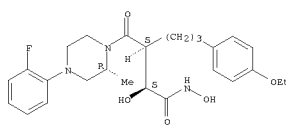
Absolute stereochemistry.



RN **874646-58-9** ZCAPLUS

CN 1-Piperazinebutanamide, β -[3-(4-ethoxyphenyl)propyl]-4-(2-fluorophenyl)-N, α -dihydroxy-2-methyl- γ -oxo-, (aS,BS,2R)- (CA INDEX NAME)

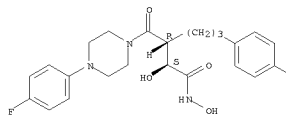
Absolute stereochemistry.



RN **874646-79-4** ZCAPLUS

CN 1-Piperazinebutanamide, β -[3-(4-ethoxyphenyl)propyl]-4-(4-fluorophenyl)-N, α -dihydroxy- γ -oxo-, (aS,BR)- (CA INDEX NAME)

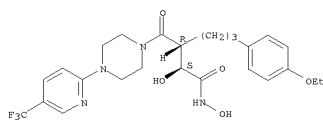
Absolute stereochemistry.



RN **874646-82-9** ZCAPLUS

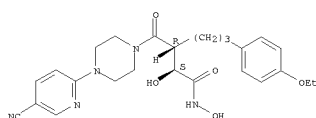
L11 ANSWER 1 OF 1 ZCAPLUS COPYRIGHT 2009 ACS on SIN (Continued)
 CN 1-Piperazinebutanamide, β -[3-(4-ethoxyphenyl)propyl]-N, α -dihydroxy- γ -oxo-4-[5-(trifluoromethyl)-2-pyridinyl]-, (α S, β R)- (CA INDEX NAME)

Absolute stereochemistry.



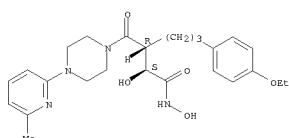
RN 874646-85-2 ZCAPLUS
 CN 1-Piperazinebutanamide, 4-(5-cyano-2-pyridinyl)- β -[3-(4-ethoxyphenyl)propyl]-N, α -dihydroxy- γ -oxo-, (α S, β R)- (CA INDEX NAME)

Absolute stereochemistry.



RN 874646-86-3 ZCAPLUS
 CN 1-Piperazinebutanamide, β -[3-(4-ethoxyphenyl)propyl]-N, α -dihydroxy-4-(6-methyl-2-pyridinyl)- γ -oxo-, (α S, β R)- (CA INDEX NAME)

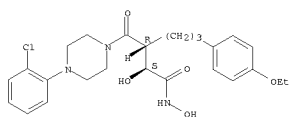
Absolute stereochemistry.



RN 874646-87-4 ZCAPLUS
 CN 1-Piperazinebutanamide, 4-(6-chloro-2-pyridinyl)- β -[3-(4-ethoxyphenyl)propyl]-N, α -dihydroxy- γ -oxo-, (α S, β R)- (CA INDEX NAME)

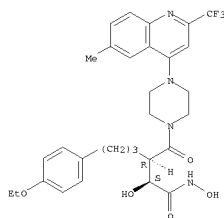
Absolute stereochemistry.

L11 ANSWER 1 OF 1 ZCAPLUS COPYRIGHT 2009 ACS on SIN (Continued)



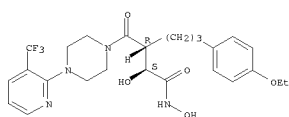
RN 874646-93-2 ZCAPLUS
 CN 1-Piperazinebutanamide, β -[3-(4-ethoxyphenyl)propyl]-N, α -dihydroxy-4-(6-methyl-2-(trifluoromethyl)-4-quinolinyl)- γ -oxo-, (α S, β R)- (CA INDEX NAME)

Absolute stereochemistry.



RN 874646-94-3 ZCAPLUS
 CN 1-Piperazinebutanamide, β -[3-(4-ethoxyphenyl)propyl]-N, α -dihydroxy- γ -oxo-4-[3-(trifluoromethyl)-2-pyridinyl]-, (α S, β R)- (CA INDEX NAME)

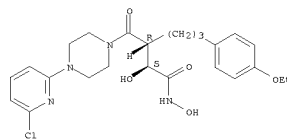
Absolute stereochemistry.



RN 874646-95-4 ZCAPLUS
 CN 1-Piperazinebutanamide, 4-(3,5-dichloro-4-pyridinyl)- β -[3-(4-ethoxyphenyl)propyl]-N, α -dihydroxy- γ -oxo-, (α S, β R)- (CA INDEX NAME)

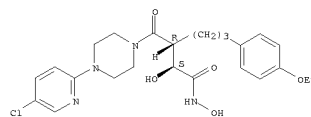
Absolute stereochemistry.

L11 ANSWER 1 OF 1 ZCAPLUS COPYRIGHT 2009 ACS on SIN (Continued)



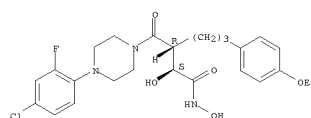
RN 874646-88-5 ZCAPLUS
 CN 1-Piperazinebutanamide, 4-(5-chloro-2-pyridinyl)- β -[3-(4-ethoxyphenyl)propyl]-N, α -dihydroxy- γ -oxo-, (α S, β R)- (CA INDEX NAME)

Absolute stereochemistry.



RN 874646-89-6 ZCAPLUS
 CN 1-Piperazinebutanamide, 4-(4-chloro-2-fluorophenyl)- β -[3-(4-ethoxyphenyl)propyl]-N, α -dihydroxy- γ -oxo-, (α S, β R)- (CA INDEX NAME)

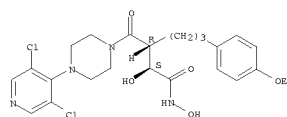
Absolute stereochemistry.



RN 874646-92-1 ZCAPLUS
 CN 1-Piperazinebutanamide, 4-(2-chlorophenyl)- β -[3-(4-ethoxyphenyl)propyl]-N, α -dihydroxy- γ -oxo-, (α S, β R)- (CA INDEX NAME)

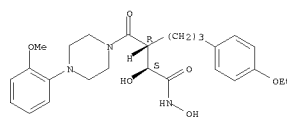
Absolute stereochemistry.

L11 ANSWER 1 OF 1 ZCAPLUS COPYRIGHT 2009 ACS on SIN (Continued)



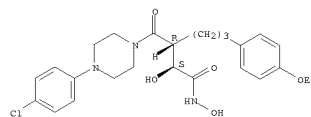
RN 874646-96-5 ZCAPLUS
 CN 1-Piperazinebutanamide, β -[3-(4-ethoxyphenyl)propyl]-N, α -dihydroxy-4-(2-methoxyphenyl)- γ -oxo-, (α S, β R)- (CA INDEX NAME)

Absolute stereochemistry.



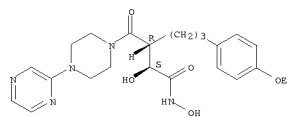
RN 874646-97-6 ZCAPLUS
 CN 1-Piperazinebutanamide, 4-(4-chlorophenyl)- β -[3-(4-ethoxyphenyl)propyl]-N, α -dihydroxy- γ -oxo-, (α S, β R)- (CA INDEX NAME)

Absolute stereochemistry.



RN 874646-98-7 ZCAPLUS
 CN 1-Piperazinebutanamide, β -[3-(4-ethoxyphenyl)propyl]-N, α -dihydroxy- γ -oxo-4-(2-pyrazinyl)-, (α S, β R)- (CA INDEX NAME)

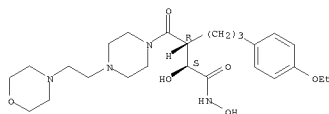
Absolute stereochemistry.



RN 874646-99-8 ZCAPLUS
 CN 1-Piperazinebutanamide, β -[3-(4-ethoxyphenyl)propyl]-N, α -dihydroxy-4-[2-(4-morpholinyl)ethyl]- γ -oxo-, (α S, β R)- (CA INDEX NAME)

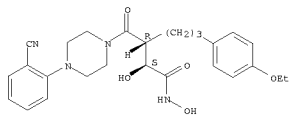
L11 ANSWER 1 OF 1 SCAPLUS COPYRIGHT 2009 ACS on SIN (Continued)

Absolute stereochemistry.



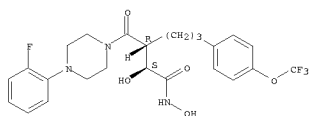
RN 874647-00-4 SCAPLUS
 CN 1-Piperazinebutanamide, 4-(2-cyanophenyl)-β-[3-(4-ethoxyphenyl)propyl]-N,α-dihydroxy-γ-oxo-, (αS,βR)- (CA INDEX NAME)

Absolute stereochemistry.



RN 874647-01-5 SCAPLUS
 CN 1-Piperazinebutanamide, 4-(2-fluorophenyl)-N,α-dihydroxy-γ-oxo-β-[3-(4-(trifluoromethoxy)phenyl)propyl]-, (αS,βR)- (CA INDEX NAME)

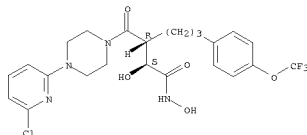
Absolute stereochemistry.



RN 874647-02-6 SCAPLUS
 CN 1-Piperazinebutanamide, 4-(6-chloro-2-pyridinyl)-N,α-dihydroxy-γ-oxo-β-[3-(4-(trifluoromethoxy)phenyl)propyl]-, (αS,βR)- (CA INDEX NAME)

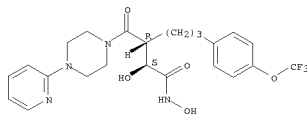
Absolute stereochemistry.

L11 ANSWER 1 OF 1 SCAPLUS COPYRIGHT 2009 ACS on SIN (Continued)



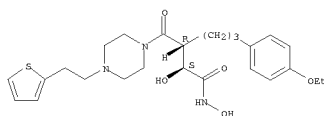
RN 874647-04-8 SCAPLUS
 CN 1-Piperazinebutanamide, N,α-dihydroxy-γ-oxo-4-(2-pyridinyl)-β-[3-(4-(trifluoromethoxy)phenyl)propyl]-, (αS,βR)- (CA INDEX NAME)

Absolute stereochemistry.



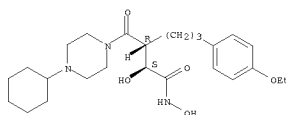
RN 874647-38-8 SCAPLUS
 CN 1-Piperazinebutanamide, β-[3-(4-ethoxyphenyl)propyl]-N,α-dihydroxy-γ-oxo-4-(2-thienyl)ethyl-, (αS,βR)- (CA INDEX NAME)

Absolute stereochemistry.



RN 874647-40-2 SCAPLUS
 CN 1-Piperazinebutanamide, 4-cyclohexyl-β-[3-(4-ethoxyphenyl)propyl]-N,α-dihydroxy-γ-oxo-, (αS,βR)- (CA INDEX NAME)

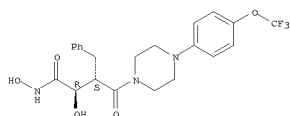
Absolute stereochemistry.



L11 ANSWER 1 OF 1 SCAPLUS COPYRIGHT 2009 ACS on SIN (Continued)

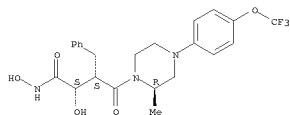
RN 874647-54-8 SCAPLUS
 CN 1-Piperazinebutanamide, N,α-dihydroxy-γ-oxo-β-(phenylmethyl)-4-[4-(trifluoromethoxy)phenyl]-, (αR,βS)- (CA INDEX NAME)

Absolute stereochemistry.



RN 874647-55-9 SCAPLUS
 CN 1-Piperazinebutanamide, N,α-dihydroxy-γ-oxo-β-(phenylmethyl)-4-[4-(trifluoromethoxy)phenyl]-, (αS,βS,2R)- (CA INDEX NAME)

Absolute stereochemistry.



RE.CNT 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

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(FILE 'HOME' ENTERED AT 17:10:30 ON 17 SEP 2009)

FILE 'ZCAPLUS' ENTERED AT 17:10:45 ON 17 SEP 2009
L1 1 US20060281920/PN

FILE 'REGISTRY' ENTERED AT 17:11:03 ON 17 SEP 2009

FILE 'ZCAPLUS' ENTERED AT 17:11:03 ON 17 SEP 2009
L2 TRA L1 1- RN : 118 TERMS

FILE 'REGISTRY' ENTERED AT 17:11:03 ON 17 SEP 2009

L3 118 SEA L2
L4 57 L3 AND NC2NC2/ES
L5 STR
L6 4 L5
L7 74 L5 FULL
SAV TEM J433C1RCE/A L7
L8 45 L7 AND L3
L9 29 L7 NOT L8

FILE 'ZCAPLUS' ENTERED AT 17:20:07 ON 17 SEP 2009

L10 1 L8
L11 1 L9

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